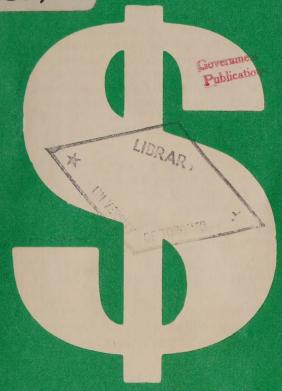
# the wise use of electricity

and how to save money on your energy bill

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There is a growing awareness these days that we should all be alert to ways of avoiding waste and conserving our natural resources. At Hydro we whole-heartedly endorse this trend and have produced this booklet to help you make the best possible use of energy throughout your home.

# heating the home

These ideas will help you make better use of electricity in whatever kind of heating system you use.



1. **Thermostats.** For every degree below a setting of 21°C (70°F) you will save a substantial amount of fuel. Try a lower thermostat setting than usual, you will be helping to conserve Canada's non-renewable resources. If you permanently lower your thermostat from 21°C to 20°C (70°F to 68°F) you will save about five per cent annually.

Most people prefer a cooler temperature for sleeping and setting the thermostat back at night for seven or eight hours will conserve additional energy.

Opening bedroom windows to get fresh air wastes fuel.

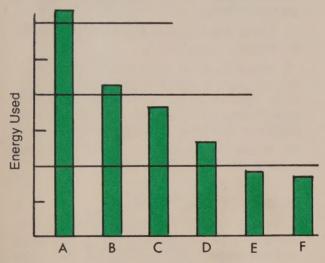
Sufficient fresh air enters your home through normal leakage around doors and windows.

- 2. **Never place a lamp**, TV set or other heat producing appliance near the thermostat. Rising heat can give a false reading to the heating system.
- 3. Have your entire heating system checked before the heating season. A neglected heating system is inefficient and may let you down. Once a month, take a look at the filter. A dust clogged filter means your system has to work

much harder and wastes fuel. Keeping filters clean will keep the air inside your home cleaner and allow more heat to pass through the system.



4. **Be sure your home has enough insulation.** It takes almost *twice as much fuel* to heat an uninsulated home. In an older home the insulation may have settled or deteriorated. Insulating your home can increase comfort and reduce heating cost. The following chart shows the effect of insulation in heating an average 1000 square foot home:



- (A) No insulation.
- (B) 3 inches of mineral wool over ceilings only.
- (C) 3 inches of mineral wool over ceilings and 2 inches of insulation in walls.

- (D) 3 inches of insulation over ceilings and 2 inches of insulation in walls and under floors over unheated areas.
- (E) 3 inches of insulation over ceilings, in walls and under floors, and with storm windows and doors.
- (F) 6 inches of insulation over ceilings and 3 inches of insulation in walls and under floors, and with storm windows and doors.
- 5. Along with the insulation seal cracks around the door and window frames with caulking. You should also have well fitted storm doors, windows and ensure that weather-stripping is installed on all doors and windows. Storm doors and windows reduce heat loss up to 15%.
- 6. Drawing the curtains is a form of insulation. Windows are a prime source of heat loss—draperies form a barrier. On sunny days let the sunshine in.
- 7. **Don't waste energy** heating space you're not using. Close doors leading to unheated parts of the house. If you have a spare guest room that's not being used, shut off the heat and close the door.
- 8. Close the fireplace damper tightly when the fireplace is not in use.
- 9. **Keep heating registers** and cold air returns clean and clear. Putting furniture over or in front of a heat source interferes with natural circulation and the heated air may discolour light fabrics and synthetics.
- 10. When the heat is on keep doors to the outside, garage and attic firmly shut.

## summer cooling

- 1. **Proper insulation** is just as important in keeping your home cool. Follow the ideas outlined under "Heating the Home." And make sure the air conditioning unit fits tightly.
- 2. Air conditioners have filters that should be checked and cleaned regularly. Not only to conserve energy, but to keep the air in your home free from dust and pollens.



- 3. **Electric lights and appliances** generate heat. Make sure they're turned off when not in use.
- 4. Make sure the clothes dryer is vented outdoors.
- 5. Always keep windows and outside doors completely closed while your cooling unit is operating.
- 6. **If you go away** on a trip or vacation, turn your air conditioner off before you go. Ask a neighbour to turn it on a few hours before you expect to return. This will conserve energy.

### in the kitchen

You use more electricity in your kitchen than in any other room in your house. There's a lot you can do to conserve energy here.

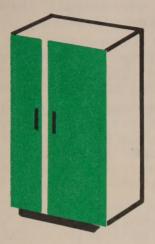


- 1. When cooking vegetables—don't drown them—about ½ a cup of water is usually plenty—and cook only until tender. You'll save vitamins and the food will taste and look better. If you use too much water then you'll be using unnecessary energy in bringing the water to a boil.
- 2. Use well fitted sauce pan lids to keep the heat inside. Start to boil water on a "high" setting, then reduce to "low" or "simmer." The food won't cook any faster on "high," you'll just use more energy and produce more heat.



- 3. **Pick a pan** that fits the element. This will avoid waste heat escaping from around the edges. Keep the lid on the pan for faster heating.
- 4. Consider the oven for whole meal cooking. Pick foods that cook in the same time at the same temperature. And don't open up the oven door for a quick peek unless you have to—heat escapes quicker than you think. Preheating is often unnecessary. Generally any food requiring more than a full hour of cooking time may be placed in a cold oven.
- 5. Toast in the toaster—NOT THE OVEN. The oven is wasteful for such a minor task. When boiling water for one cup of tea or coffee don't fill the kettle and boil more than you need.
- 6. **Never use the oven** to heat up a cool kitchen. A small space heater will do the job more efficiently, and use less energy.
- 7. Always double check to make sure all surface elements are turned off after use. When cooking you can often turn off the units up to five minutes ahead of time—and let the food continue to cook as the heat diminishes.
- 8. If your refrigerator needs defrosting, do it before the ice deposit reaches 1/4" thickness. Ice acts as unwanted insulation, reduces cooling power and will raise the temperature in

the freezer section. A refrigerator should not be set to run colder than necessary. Check the control, maybe it could be set back a notch or two.



- 9. **Be sure your refrigerator** is air tight. A good test—close the door on a piece of ordinary paper. If the paper is easy to pull out, then you're wasting cold air. Replace the gasket.
- 10. **Never open the refrigerator door** more often than necessary. Opening and closing the door or leaving it open is wasteful.
- 11. A refrigerator should be installed away from direct warm spots. Allow enough room along the sides and at the back for free air circulation. A built-in refrigerator may lack proper air circulation—this places a burden on the cooling system since heat cannot be dissipated.
- 12. **Overcrowding a refrigerator** interferes with normal air circulation inside and will tend to overwork the compressor to maintain a cold temperature.

### other appliances

Reading the manufacturers instructions is a basic way to prevent wasting energy and ensure top performance from any appliance. Learning all the features and what each will do allows you to run the equipment properly.

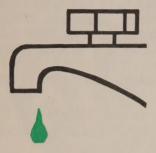
- 1. Run a dishwasher only when there's a full load to be done. In the meantime, use it to store dishes and cutlery until you're ready to wash the dirty dishes. This way you'll need fewer washes and save hot water. Pre-rinse with cold water so food won't stick.
- 2. If your clothes washer has a water level selector, choose the correct setting for the size of the load. Remember that only sufficient water is necessary for good results.
- 3. An automatic washer goes through the same cycle for a full load or a single sock. The more you plan your wash for full loads, the more electricity and hot water you save. Varying the size of garments in each full load allows freer circulation—improves cleaning action.
- 4. **Special features.** Some special features help conserve energy. A soak cycle loosens stubborn stains so you only have to wash heavily soiled clothes once. Also, these partial cycles often use only cold water.
- 5. Clean the lint filter on a clothes dryer after each load. Never overdry clothes...it makes them harsh and stiff, in addition to wasting energy. If your dryer is not fully automatic experiment with the controls to determine the right setting for just-dry clothes.



- 6. **An unwatched television set** left on wastes energy and may even hasten repair bills.
- 7. Replace or empty the dust bag in your vacuum cleaner regularly. If too much dust collects, the motor will be placed under a strain and the vacuum won't work efficiently.

### conserving water

1. A dripping hot tap or shower head can be a source of extreme waste. One drop a second adds up to about 175 gallons a month—down the drain. A simple tap washer conserves hot water.

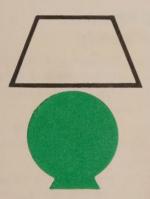


2. **Long pipe** runs between the water heater and the taps should be wrapped with insulation, if practical.

## lighting

Putting one lamp here and another over there isn't really the best way to light a room. Here are some ideas for using lighting to its best advantage.

1. **Keep bulbs and fixtures clean.** Almost unnoticed layers of dust will lower the lighting level.



2. Avoid glare. It can tire your eyes in a hurry. Be sure light bulbs are shaded, and lighting equipment properly placed so that it doesn't reflect on television screens, glossy magazines and other shiny surfaces.

- 3. Contrast is another eye strainer. Avoid it by using lamps and shades that send light upwards as well as downwards, and are wide enough at the bottom to spread light over a wide area. And don't confine light to one spot in the room.
- 4. In addition to providing light both upward and downward, your lamp shades should conceal light bulbs both when standing and when you're seated. Shades should have a white or near-white lining to reflect light, they should be dense enough to keep the bulb from glaring.
- 5. **Turning off the lights** when they're not needed is something a lot of homeowners forget to do.
- 6. When re-decorating consider light colours on ceilings and walls. Since light colours reflect more light it could mean that you'll need fewer lamps or lamps of lower wattages.
- 7. The economy of fluorescent lamps for business and industrial purposes has been recognized for years. A 40-watt fluorescent lamp produces more light than a 100 watt incandescent bulb—and at less cost. When adding light consider fluorescent fixtures for kitchen, laundry and the workshop.

### practical ideas for electrical safety

- 1. When a fuse blows never replace it with a fuse of higher ampere rating. A blown 15 amp fuse should always be replaced with only a new 15 amp fuse.
- 2. Never try to cheat the fuse system by substituting a penny or other metal object for a fuse.
- 3. Some power tools have a three pronged plug. Don't remove the extra prong just to make it fit an existing outlet. The third prong provides grounding protection.
- 4. Constantly blowing fuses and overheated wiring is a danger sign. Have your wiring checked.

- 5. When painting eavestroughs or working around the house—keep ladders well away from incoming service wires.
- 6. When buying any appliance make sure it is CSA approved. Look for this symbol on a tag—or on the manufacturers name plate.



By using these tips we hope that you'll continue to use all our resources wisely. When electricity is working harder for you, at less cost, you'll be doing yourself a good turn and helping at the same time to make wise and efficient use of our natural resources.

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